

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Claims 1-15 were pending in this application. By way of the reply of December 16, 2004, claims 1, 8, and 12 were cancelled without prejudice or disclaimer and new claims 16-18 were added. By way of this reply, claims 9-11 have been cancelled without prejudice or disclaimer. Thus, claims 2-7, and 13-18 are pending in this application. Claims 2 and 4 are independent. The remaining claims depend, directly or indirectly, from claims 2 and 4.

Claim Amendments

Claims 2-7, 13-15, and 18 have been amended in this reply to clarify the present invention recited. Support for these amendments may be found, for example, in original claims and Fig. 2. No new matter has been added.

Objection(s)

Claims 3 and 5-7 stand objected to because of lack of antecedent basis. Claims 3 and 5-7 have been amended in view of this objection. Accordingly, withdrawal of this objection is respectfully required.

Rejection(s) under 35 U.S.C § 102

Claims 2-7, 9-11, and 13-18 stand rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent 6,373,265 (hereinafter "Morimoto et al."). Claims 9-11 have been cancelled. Thus, this rejection as it applies to claims 9-11 is now moot. Further, claims 2-7, 13-15, and 18 have been amended in this reply to clarify the present invention recited. To the extent that this rejection may still apply to the amended claims, this rejection is respectfully traversed.

Claims 2, 3, 5, 6, 13, 14, and 16-18

Independent claim 2 is directed to a sensor sheet comprising a plurality of sensors, which is capable of measuring distribution of multidimensional forces. Specifically, as shown in, for example, Fig. 1, the sensor sheet 1 of the present invention comprises a plurality of sensors 10 arranged in a matrix and covered with a cover layer 40. More specifically, as shown in, for example, Figs. 2-5, each of the plurality of sensors 10 includes a plurality of electrodes D1-D5 disposed on a film substrate 20, a reference electrode D0 grounded, and a displaceable electrode 30 supported by an elastic supporting member 60 to face the electrodes D0-D5 such that variable capacitance elements are formed by the electrodes D1-D5 and the displaceable electrode 30. The displaceable electrode 30 contacts the reference electrode D0 when an external force is applied thereto, and, as a consequence, a signal passes through the electrodes D1-D5. Because of this configuration, each of the plurality of sensors 10 can identify the force in a multidimensional direction on the basis of the detection of changes in capacitance of the

capacitance elements by changes in distances between the electrodes D1-D5 and the displaceable electrode 30, thereby allowing the sheet sensor 1 to measure distribution of the multidimensional forces. Thus, as specifically required in claim 2 of the present application, the sensor sheet 1 has the plurality of sensors 10 arranged in a matrix capable of identifying multidimensional force, an elastic supporting member 60 configured to partition the plurality of sensors 10, and a cover layer configured to cover the plurality of sensors 10.

Morimoto et al., in contrast, fails to show or suggest all of the limitations recited in claim 2. Morimoto et al. merely discloses a structure of only one electrostatic capacitive touch sensor. Specifically, as shown in Figs. 1-4, the electrostatic capacitive touch sensor S of Morimoto et al. has fixed electrodes Dx+, Dx-, Dy+, Dy-, and Dz+, which are covered with a resist film R, mounted on a substrate 1, movable electrode plate 2 facing the fixed electrodes Dx+, Dx-, Dy+, Dy-, and Dz+. The movable electrode plate 20 is configured integrally by a silicone rubber section 20 having an operation portion 20a and a conductive rubber layer section 21. Thus, an external force applied to the operation portion 20a can be identified on the basis of changes in capacitance caused by changes of a gap between any of fixed electrodes Dx+, Dx-, Dy+, Dy-, and Dz+ and the conductive rubber layer section 21. However, there exists nothing in Morimoto et al. to show or suggest that a sensor sheet be comprised of a plurality of sensors covered with a cover layer. As a consequence, Morimoto et al. also fails to show or suggest an elastic supporting member as recited in claim 2.

Further, it was asserted that the sensors Dx, Dy, and Dz are arranged in a matrix as shown in Fig. 15 of Morimoto. However, Applicant respectfully disagrees. The

configuration shown in Fig. 15 is the electrostatic capacitive touch sensor itself. Thus, arranged are the fixed electrodes Dx+, Dx-, Dy+, Dy-, and Dz+, not a plurality of electrostatic capacitive touch sensors.

In view of the above, Morimoto et al. fails to show or suggest the present invention as recited in independent claim 2. Thus, claim 2 as amended is patentable over Morimoto et al. Dependent claims are allowable for at least the same reasons. Accordingly, withdrawal of this rejection of claim 2 is respectfully requested.

Claims 4, 7, and 15

Independent claim 4 is directed to a sensor sheet comprising a plurality of sensors, which is capable of measuring distribution of multidimensional forces. As mentioned above, the sensor sheet 1 of the present invention comprises a plurality of sensors 310 arranged in matrix. As shown in, for example, Figs. 13-16, each of the plurality of sensors 310 includes a plurality of conductive lands D11-D15 and D21-D25 disposed on a film substrate 20 to face each other, and pressure-sensitive resistance inks R11-R15 and R21-R25 disposed between the lands D11-D15 and D21-D25. It is noted that each of the plurality of sensors 310 is of a *resistance* type. Because of this configuration, the sensor 310 can identify the distribution of force on the basis of the detection of changes in resistance between the lands D11-D15 and D21-D25. Thus, independent claim 4 includes the limitation, “a pressure-sensitive resistance member arranged between the plurality of first electrodes and the second electrode.”

As discussed above, Morimoto et al. discloses a structure of only one electrostatic capacitive touch sensor. There is no mention in Morimoto et al. of a sensor sheet

comprising a plurality of sensors. Further, the resist film R noted by the Examiner is to prevent the fixed electrodes Dx+, Dx-, Dy+, Dy-, and Dz+ from directly contacting the conductive rubber layer section 31. Thus, the resist film R is not the same as, or equivalent to, the pressure-sensitive resistance member as recited in claim 4. Accordingly, Morimoto et al. fails to show or suggest all of the limitations as recited in claim 4.

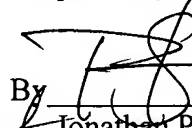
In view of the above, Morimoto et al. fails to show or suggest the present invention as recited in the independent claim 4. Thus, claim 4 is patentable over Morimoto et al. Dependent claims are allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 07700.042001).

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Respectfully submitted,

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